

This video colorizer was designed by Dave Jones at the Experimental Television Center in 1974 and 1975, and funded by a grant from the New York State Council on the Arts. Features in this colorizer were, in part, a reaction to the other colorizer at the TV Center at that time, the Paik/Abe colorizer. While the Paik/Abe made lots of color, there was little control over what colors would appear in what parts of the image. Also, the Paik/Abe passed it's video directly through the control knobs which meant that the image became noisy and streaky as the controls wore out.

Dave designed his colorizer with specific Red, Green, and Blue controls on each of four channels so that there was specific control over the colors in each channel without affecting the other channels. He also designed the controls to all use voltage control so that the video never actually goes through the controls, and can then not be affected by the age or quality of the knobs. This voltage control also allowed oscillators and other sources of voltages to effectively "turn the knob", allowing many additional effects and patterns to be created with the colorizer when combined with other machines. This colorizer was given the name "Jones Colorizer" by Ralph Hocking, the director of the Experimental Television Center, in the tradition ETC had of naming machines after the inventor.

The original Jones Colorizer was a four channel device, where each channel had a Red, Green, and Blue control to mix the color for that channel. Each channel also had a Saturation control to adjust the strength of that color without having to try and re-mix the three primary color controls to get the exact same color. Each channel had a Video Level control to mix an external video signal with the color. There was a separate video input for each channel. There was also a Brightness (aka Pedestal) control for each channel. Each channel also had a Clip control which acted sort of like a video keyer. By turning the Clip control you could turn that channel black in areas of the image where the external video contained certain shades of gray. For example, by setting the Clip control in the middle you would eliminate all shades of gray darker than middle gray, keeping (and colorizing) only the shades lighter than that. This was useful for combining the images from the different channels such that each channel would typically only appear on a portion of the screen.

The colorizer also had overall Contrast and Brightness controls so that the overall image could be adjusted without having to change each individual channel's controls.

The four channels were not simply mixed together, but were combined in a special way known as "Diode" or "Layered" mixing. This special technique, unique to this colorizer, created a layering effect similar to keying where at any given pixel on the screen you saw whichever channel was the brightest at that pixel. This allowed you to, in a sense, push one image through the darker areas of another image.

Another feature of this colorizer that is unique, is that this was the only colorizer that created it's colors without the use of a "Color Encoder" (a circuit design borrowed from color cameras and other television equipment). The Jones colorizer created it's colors by internally generating three solid images of Red, Green, and Blue, and then used standard video mixing techniques to blend them together to get the desired color.

In the early 1980's another grant from NYSCA paid for the development of a second generation version of this colorizer. The new one had the same basic control structure, but was built with six channels, and allowed more control over the keying section of each channel. A Soft/Hard control was added to each channel to adjust between a hard or soft edge on the clipping. Each channel was also given a rotary switch to allow the clip control to use any of the six external video inputs as the source for the keying for that channel. Switches were also added to each channel to allow the external video inputs to be either positive or negative video. Each channel also had a switch to turn off that channel, so channels could be set up in advance and simply turned on or off as needed when processing the images. A switch

was also added at the output of the colorizer to select between the Diode (layered) mixing of channels or a more conventional blending (additive mix) of channels. This six channel colorizer is in daily use today at the studio of the Experimental Television Center.

A couple of copies of the second generation colorizer were built as kits by artists who were involved with the TV Center. A couple others were built and sold by Dave Jones, under his company name Designlab, to other artists and schools.

Dave Jones has been talking about creating a third generation version of this colorizer, to sell under his current company, Dave Jones Design, but as of yet this has not happened.